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EXAMINER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CRAIG D. HUTSON, CHRIS GAINES,
and DANIEL A. HANSON

Appeal 2015-005045¹
Application 13/315,085²
Technology Center 3600

Before MURRIEL E. CRAWFORD, NINA L. MEDLOCK, and
BRADLEY B. BAYAT, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–16. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Our decision references Appellants' Appeal Brief ("App. Br.," filed October 1, 2014) and Reply Brief ("Reply Br.," filed April 3, 2015), and the Examiner's Answer ("Ans.," mailed February 5, 2015) and Final Office Action ("Final Act.," mailed August 21, 2013).

² Appellants identify Exceleron Software, Inc. as the real party in interest. App. Br. 3.

CLAIMED INVENTION

Appellants' claimed invention is directed to a system and method for prepay account management (Title).

Claims 1 and 9 are the independent claims on appeal. Claim 1, reproduced below with added bracketed notations, is illustrative of the claimed subject matter:

1. A prepay account management system in communication with a billing system, the prepay account management system comprising:

[(a)] a prepay customer database operable to store a prepay customer account balance and an estimated usage data of a prepay customer;

[(b)] a data link operable to transmit the prepay customer account balance and an actual usage data of the prepay customer between the prepay account management system and the billing system, wherein the actual usage data of the prepay customer is extracted from the billing system; and

[(c)] a prepay server operable to:

[(1)] receive the transmitted prepay customer account balance and the actual usage data, the prepay server operable to receive replenishing payment amounts;

[(2)] update a current balance of the prepay customer account in response to the estimated usage data and the replenishing payment amounts; and

[(3)] reconcile a balance of the prepay customer account with the actual usage data of the prepay customer by comparing the estimated usage data with the actual usage data.

REJECTIONS³

Claims 1–16 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

Claim 16 is rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.⁴

Claims 1–14 are rejected under 35 U.S.C. § 103(a) as unpatentable over Atkinson et al. (US 2003/0225713 A1, pub. Dec. 4, 2003, hereinafter “Atkinson”) and Brown et al. (US 2003/0055677 A1, pub. Mar. 20, 2003) (hereinafter “Brown”).

Claim 15 is rejected under 35 U.S.C. § 103(a) as unpatentable over Atkinson, Brown, and Sloan et al. (US 5,146,067, iss. Sept. 8, 1992) (hereinafter “Sloan”).

Claim 16 is rejected under 35 U.S.C. § 103(a) as unpatentable over Atkinson, Brown, Luttrell (US 7,274,305 B1, iss. Sept. 25, 2007), and Fischer et al. (US 2002/0065761 A1, pub. May 30, 2002) (hereinafter “Fischer”).

ANALYSIS

Non-Statutory Subject Matter

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and

³ Appellants canceled claim 17 in an After Final Amendment, filed September 23, 2014, which was entered by the Examiner in the Advisory Action, mailed October 6, 2014. *See* Ans. 3.

⁴ The rejection of canceled claim 17 under § 112, first paragraph, is moot.

abstract ideas” are not patentable. *See, e.g., Alice Corp. Pty Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1300 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of these concepts.” *Alice Corp.*, 134 S. Ct. at 2355. The first step in that analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are not directed to a patent-ineligible concept, e.g., to an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Alice Corp.*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1297).

The Court acknowledged in *Mayo*, that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo*, 132 S. Ct. at 1293. We, therefore, look to whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.

Here, in rejecting claims 1–16 under 35 U.S.C. § 101, the Examiner finds that the claims are directed to a “series of steps of managing a prepaid account, updating it due to estimated financial transactions, and reconciling the account through a comparison of estimated and actual transactions, which is a fundamental economic practice and thus an abstract idea”; and

that “[t]he claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the server and processor are merely general purpose computers that do not perform significant post solution activity, or significantly more than the abstract idea itself” (Ans. 2).

Appellants first argue that the § 101 rejection cannot be sustained because the Examiner has “provided no argument and/or evidence to support the assertion that a ‘series of steps of managing a prepaid account, updating it due to estimated financial transactions, and reconciling the account through a comparison of estimated and actual transactions’ is a fundamental economic practice and thereby an abstract idea” (Reply Br. 14–15).

Appellants assert that the Supreme Court, in *Bilski v. Kappos*, 130 S. Ct. 3218, 3231 (2010), and also in *Alice*, cited authority (i.e., three finance textbooks in *Bilski* and two textbooks and a law review article in *Alice*), for the proposition, in *Bilski*, that “hedging,” and in *Alice*, that “mitigating settlement risk,” is a fundamental economic practice (*id.* at 15). And Appellants ostensibly maintain that the Examiner is likewise required to cite authority here in order to establish a prima facie case of unpatentability (*id.*). We disagree.

As an initial matter, we find nothing in *Bilski* or *Alice* that requires the Office to identify specific references to support a finding that a claim is directed to an abstract idea. Indeed, the Federal Circuit has repeatedly noted that “the prima facie case is merely a procedural device that enables an appropriate shift of the burden of production.” *Hyatt v. Dudas*, 492 F.3d 1365, 1369 (Fed. Cir. 2007) (citing *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992)). The court has, thus, held that the USPTO carries its procedural

burden of establishing a prima facie case when its rejection satisfies the requirements of 35 U.S.C. § 132 by notifying the applicant of the reasons for rejection, “together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application.” *See In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011). Thus, all that is required of the Office is that it set forth the statutory basis of the rejection, and the reference or references relied on, in a sufficiently articulate and informative manner as to meet the notice requirement of § 132. *Id.*; *see also Chester v. Miller*, 906 F.2d 1574, 1578 (Fed. Cir. 1990) (35 U.S.C. § 132 “is violated when the rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection.”).

Here, in rejecting the pending claims under § 101, the Examiner analyzed the claims using the *Mayo* two-step framework, in accordance with the guidance set forth in the USPTO’s June 25, 2014 “Preliminary Examination Instructions in view of the Supreme Court Decision in *Alice Corporation Pty. Ltd. v. CLS Bank International, et al.*,” the Examiner also fully complied with the requirement set forth in Manual of Patent Examining Procedure (“MPEP”) § 2106(III) to “identify and explain in the record the reasons why a claim is for an abstract idea.” Specifically, the Examiner notified Appellants that the claims are directed to a “series of steps of managing a prepaid account, updating it due to estimated financial transactions, and reconciling the account through a comparison of estimated and actual transactions,” which the Examiner found is a fundamental economic practice and, therefore, an abstract idea, and that the claims do not include additional elements that are sufficient to amount to significantly more than the abstract idea itself (Ans. 2). The Examiner, thus, notified

Appellants of the reasons for the rejection “together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application.” 35 U.S.C. § 132. And, in doing so, we find that the Examiner set forth a *prima facie* case of unpatentability.

Appellants argue that even if the claims are directed to a “series of steps of managing a prepaid account, updating it due to estimated financial transactions, and reconciling the account through a comparison of estimated and actual transactions,” and even if this is an abstract idea, the claims recite significantly more than the abstract idea itself (Reply Br. 16). Appellants note that the pending claims stand rejected as obvious over multiple references, and assert that “there is little to no preemption concern on the present facts” (*id.*). Yet the law is clear that although “preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015).

We also are not persuaded by Appellants’ argument that the claims recite significantly more than an abstract idea because the claims improve the functioning of the computer itself (Reply Br. 17). Appellants maintain that the claims provide an improvement to the functions of a computing system by permitting the system to provide a prepay account management system that the computer could not previously do, as evidenced by the fact that none of the claims is rejected as anticipated by a reference and by the fact that there is no proper combination of references that renders the claims obvious (*id.*). But, even accepting Appellants’ argument, there is a fundamental difference between computer functionality improvements, on

the one hand, and uses of existing computers as tools to perform a particular task, on the other.

Indeed, the Federal Circuit applied this distinction in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d. 1327 (Fed. Cir. 2016) in rejecting a § 101 challenge at the step one stage in the *Alice* analysis because the claims at issue focused not on asserted advances in uses to which existing computer capabilities could be put, but on a specific type of data structure, i.e., a self-referential table for a computer database, designed to improve the way a computer carries out its basic functions of storing and retrieving data. *Id.* at 1335–36. The alleged improvement that Appellants tout does not concern an improvement to computer capabilities but instead relates to an alleged improvement in implementing a prepay account management system for which a computer is used as a tool in its ordinary capacity.

Further, to the extent Appellants argue that the pending claims recite “significantly more” because the claimed invention is “novel” and “non-obvious,” Appellants misapprehend the controlling precedent. Although the second step in the *Alice/Mayo* framework is termed a search for an “inventive concept,” the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for “an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.” *Alice*, 134 S. Ct. at 2355. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 132 S. Ct. at 1304.

Appellants next argue that the claims amount to “significantly more” than an abstract idea because the claims “recite ‘unconventional steps that confine the claims to a particular useful application’” (Reply Br. 17). But

that argument is not persuasive at least because the steps that Appellants identify, i.e., “receiv[ing] actual usage data . . . from a meter reading database” and “receiving real-time utility usage data,” are part of the abstract idea itself, i.e., reconciling the account through a comparison of estimated and actual transactions.

Appellants further assert that the claims “recite ‘other meaningful limitations beyond generally linking the use of the judicial exception to a particular technological environment’” (Reply Br. 18–19). But Appellants offer no persuasive argument or technical reasoning to support that position. Instead, Appellants merely reproduce the language of dependent claims 15 and 16, and summarily assert, “the[se] limitations and others in the claims move beyond linking the use of the alleged judicial exception to [a] particular technological environment, these limitations cause the claims to be directed to ‘a specific and meaningful application[] of the alleged underlying abstract idea’” (*id.* at 19).

In view of the foregoing, we sustain the Examiner’s rejection of claims 1–16 under 35 U.S.C. § 101.

Written Description

Whether a specification complies with the written description requirement of 35 U.S.C. § 112, first paragraph, is a question of fact and is assessed on a case-by-case basis. *See, e.g., Purdue Pharma L.P. v. Faulding, Inc.*, 230 F.3d 1320, 1323 (Fed. Cir. 2000) (citing *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1561 (Fed. Cir. 1991)). The disclosure, as originally filed, need not literally describe the claimed subject matter (i.e., using the same terms or *in haec verba*) in order to satisfy the written description requirement. But the Specification must convey with reasonable

clarity to those skilled in the art that, as of the filing date, Appellants were in possession of the claimed invention. *See id.*

Claim 16 depends from claim 9, and recites that the method further comprises:

- selecting by the prepay customer a first communication medium, a first frequency interval, and a first time to send a first notification associated with the prepay customer account data;

- sending, by a notification server, the first notification via the first communication medium, at the first frequency interval, and at the first time to a first device associated with the prepay customer;

- selecting by the prepay customer a second communication medium, a second frequency interval, and a second time to send a second notification associated with the prepay customer account data, wherein the second communication medium is different than the first communication medium, wherein the second frequency interval is different than the first frequency interval, and wherein the second time is different than the first time; and

- sending, by the notification server, the second notification via the second communication medium, at the second frequency interval, and at the second time to a second device associated with the prepay customer, wherein the second device is different than the first device.

Addressing claim 16, the Examiner acknowledges that Appellants describe, in paragraphs 28, 29 and Table A of the Specification, the setting of notifications regarding the prepay account and also describe setting one or more notifications for the prepayment account at a frequency and for certain conditions, such as low balance (Final Act. 8). But the Examiner finds that Appellants have failed to provide “a written description for the notifications to be sent to different devices” and, therefore, failed to “provide a written description that would convey to one skill in the art that [Appellants were] in

possession of the claimed invention at the time of filing” (*id.* at 7–8; *see also* Ans. 8–11).

Appellants argue that the rejection is improper, and that the requisite written description is provided in the Specification at Figure 1, Table A, and paragraphs 24, 29, and 33 (App. Br. 16; *see also* Reply Br. 12–14).

We have reviewed the cited portions of the Specification, on which Appellants rely. And we are persuaded that the Specification conveys with reasonable clarity to those skilled in the art that, as of the filing date, Appellants were in possession of the claimed invention, including the sending of notifications to different devices, as called for in claim 16.

Therefore, we do not sustain the Examiner’s rejection of claim 16 under 35 U.S.C. § 112, first paragraph.

Obviousness

Independent Claims 1 and 9 and Dependent Claims 2–8 and 10–14

Appellants argue claims 1–14 as a group (App. Br. 8–16). We select independent claim 1 as representative. The remaining claims stand or fall with claim 1. *See* 37 C.F.R. §41.37(c)(1)(iv).

In rejecting independent claim 1 under 35 U.S.C. § 103(a), the Examiner cites Atkinson as disclosing (1) “a prepay customer database operable to store a prepay customer account balance”; (2) “a data link operable to transmit the prepay customer account balance and an actual usage data of the prepay customer between the prepay account management system and the billing system, wherein the actual usage data of the prepay customer is extracted from the billing system”; and (3) a prepay server operable to (a) “receive the transmitted prepay customer account balance and the actual usage data, the prepay server operable to receive replenishing

payment amounts” and (b) “update a current balance of the prepay customer account in response to” the replenishing payment amounts, as recited in limitations (a), (b), (c)(1), and (c)(2) of claim 1 (Final Act. 10–11 (citing Atkinson ¶¶ 4, 45–49, 60–62, 69–121–125, and 149–151)). However, the Examiner acknowledges that Atkinson does not explicitly disclose (1) a prepay customer database operable to store an estimated usage data of a prepay customer or (2) a prepay server operable to (a) update a current balance of the prepay customer account in response to the estimated usage data and (b) reconcile a balance of the prepay customer account with the actual usage data of the prepay customer by comparing the estimated usage data with the actual usage data, as also called for in limitations (a) and (c)(2), and in limitation (c)(3) (*id.* at 11). The Examiner cites Brown to cure the deficiencies of Atkinson (*id.* (citing Brown ¶¶ 11, 43, 55, 56, 63, 71, 74, 75, 78, and 83)). And the Examiner concludes that

[i]t would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system and method of prepaying for utility usage, wherein the prepayment is done using a prepayment card, and wherein the user’s account is deducted for the energy used of Atkinson, with the system and method of predicting future energy usage for a user, wherein the user’s account changes based on this prediction, and wherein the account is adjusted based on a comparison of the actual usage with the predicted usage of Brown.

Id. at 12.

By way of background, Atkinson is directed to a prepayment system for electric power using RFID tag technology (Atkinson ¶ 4). Atkinson discloses that a customer purchases power at a retail outlet in the form of a credit to his/her card containing an RFID tag; the customer then takes the card to his/her residence or business and holds it up to the RFID

reader/writer sealed into the face of a system controller (installed near or within the premises) or uses an optional remote terminal connected to the system controller (*id.* ¶¶ 4, 60–62). The system controller credits the customer’s balance in a meter/contacter associated with the particular customer by the credit amount in the RF tag (*id.* ¶¶ 4, 45–49, 121–125); the meter/contacter measures usage, decrements the customer’s credit, and shuts off power if the credit is depleted (*id.* ¶¶ 4, 65).

Brown is directed to an Internet-based utility management system that presents, to a customer, estimated utility prices, usage terms, and a predicted load profile, including predicted utility usage of the customer for a certain period of time (Brown ¶¶ 10, 11, 43). The actual utility consumption also may be displayed as an actual load profile with the estimated utility prices, usage terms, and predicted load profile (*id.* ¶¶ 71, 74, 75, 78). Based on the actual consumption as compared to the predicted usage, the user is billed for any additional unexpected usage or reimbursed for any excess payment (*id.* ¶¶ 71, 74, 75, 78, 83).

Addressing Appellants’ arguments in turn, we are not persuaded by Appellants’ argument that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 103(a) because the proposed combination of Atkinson and Brown transforms Atkinson’s prepaid power distribution system into a postpaid system and, thereby, renders Atkinson’s system unsatisfactory for its intended purpose (App. Br. 9–14; *see also* Reply Br. 6–9). Instead, we agree with, and adopt the Examiner’s findings and rationale, as set forth at pages 3–5 of the Answer. Modifying Atkinson, as the Examiner proposes, in our view, is nothing more than a combination of prior art elements according to their established functions, and yields a predictable result, i.e., a

prepayment account system in which an energy user is able to prepay for his/her estimated usage and reconcile any difference between his/her actual and estimated usage (*see* Ans. 4–5, 7–8); therefore, it would have been obvious at the time of Appellants’ invention. *See KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 416 (2007) (“The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results”).

We also are not persuaded by Appellants’ further argument that the Examiner has failed to provide “a reasonable articulated basis” for combining Atkinson and Brown to arrive at the claimed invention, and is using the claimed invention as an “instruction manual” (App. Br. 14–16). The Examiner provides the articulated reasoning required to support the obviousness determination at least at pages 6–7 of the Answer. The Examiner’s findings also are based on the teachings of the references themselves, and not on Appellants’ Specification.

In view of the foregoing, we sustain the Examiner’s rejection of independent claim 1 under 35 U.S.C. § 103(a). We also sustain the rejection of dependent claims 2–8 and 10–14, which are not argued separately.

Dependent Claims 15 and 16

Appellants do not present any argument in support of the patentability of claims 15 and 16 separate from the arguments with respect to claims 1–14. Therefore, we also sustain the rejections of claims 15 and 16 under 35 U.S.C. § 103(a).

DECISION

The Examiner's rejection of claims 1–16 under 35 U.S.C. § 101 is affirmed.

The Examiner's rejection of claim 16 under 35 U.S.C. § 112, first paragraph, is reversed.

The Examiner's rejections of claims 1–16 under 35 U.S.C. § 103(a) are affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED